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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,037	10/31/2000	M. Ali Khatibzadeh	8194-453	8911
20792	7590	02/06/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			CORRIELUS, JEAN B	
			ART UNIT	PAPER NUMBER
			2631	
DATE MAILED: 02/06/2004				

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/703,037	KHATIBZADEH ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Jean B Corrielus	2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(h).

## Status

1)  Responsive to communication(s) filed on 31 October 2000.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-38 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 11-20 and 30-38 is/are allowed.

6)  Claim(s) 1,6-10,21 and 26-29 is/are rejected.

7)  Claim(s) 2-5 and 22-25 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a)  The translation of the foreign language provisional application has been received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5 . 6)  Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6-10, 21 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pakonen Hannu EP 0998088A2 in view of Perrett US Patent No. 6,018,275.

As per claims 1 and 21, Pakonen Hannu discloses a modulation method and apparatus fig. 3 having a DSP 1 that generates an amplitude signal A and a phase and a phase/frequency signal PHI see page 4 paragraph 0020, a modulator (20) for modulating the "PHI" signal to produce a modulated signal; a PLL circuit (11, 21, 22, 10 and 23) including a VCO 10 having a controlled output; an amplifier 5, having a signal input to receive the controlled output an amplitude control input responsive to the amplitude signal see fig. 3. Pakonen Hannu only teaches that the DSP processes I and Q signals does not explicitly teach that it generates I and Q signals to be process by the modulator 20. In the same field of endeavor, Perrett et al teaches a DSP configured to decompose a baseband signal to a complex (I and Q components) prior to a QPSK modulation see col. 7, lines 27-31. Given that fact, it would have been obvious to one skill in the art at the time of the invention to incorporate Perrett in Pakonen Hannu in order to reduce bandwidth for transmission as taught by Perrett see col. 7, lines 26-27.

As per claims 6 and 26, a power controlled signal is generated by power detector 8 and the amplifier 5 as shown in the figure is responsive to both the amplitude and the power control signals.

As per claims 8 and 28, as shown in fig. 3, Pakonen Hannu teaches inherently a transmit antenna responsive to the amplifier 5 and inherently a user interface to generate the baseband signal in response to user input such as voice, to produce a wireless communications terminal.

As per claims 9 and 29, the system is limiter free. See fig. 3.

As per claim 10 the amplifier is a power amplifier. See fig. 3.

As per claim 27, the PLL signal is transmitted as amplified see fig. 3.

As per claim 7, Perrett et al teaches a power amplifier 13 coupled to an amplifier 12 and an antenna. It would have been obvious to one skill in the art to incorporate such a teaching in, Pakonen Hannu so as to enhance signal transmission.

#### ***Allowable Subject Matter***

3. Claims 11-20 and 30-38 are allowed.
4. Claims 2-5 and 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B Corrielus whose telephone number is 305-4023. The examiner can normally be reached on Monday-Thursday from 9:00AM to 5:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-4700.

*Jean Corrielus*  
JEAN B. CORRIELUS  
PRIMARY EXAMINER  
2/5/04